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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/760,235

01/21/2004

Kia Silverbrook

MPA22US

2179

24011

7590

02/28/2006

SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, NSW 2041  
AUSTRALIA

EXAMINER

HSIEH, SHIH WEN

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/760,235

Applicant(s)

SILVERBROOK ET AL.

Examiner

Shih-wen Hsieh

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

***Claim Objections***

1. Claims 1 and 3 are objected to because of the following informalities:

In regard to:

Claim 1:

Line 2, please change "the surface" into "a surface" to correct a minor lack of antecedent basis problem.

Claim 3:

Line 1, claim 3 cannot depend on itself, appropriate correction is required.

***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

Art Unit: 2861

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-5 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3 and 5 of copending Application No. 10/760,194. Although the conflicting claims are not identical, they are not patentably distinct from each other because both cases deal with a print head module with at least two integrated circuits and its associated controls and ink supply. Below is a table of comparison between claims of these two cases to indicate their obviousness.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

<u>10/769,235</u>	<u>10/760,194</u>
<p>1. A printhead system, comprising: at least one printhead module comprising at least two printhead integrated circuits, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, a support member supporting and carrying the printing fluid for the at least two printhead integrated circuits, and at least two electrical connectors for connecting electrical signals to the respective ones of the at least two printhead integrated circuits; drive electronics incorporating at least one</p>	<p>1. A printhead assembly, comprising: at least one printhead module comprising at least <u>two printhead integrated circuits</u>, each of which has nozzles formed therein for delivering printing fluid onto the surface of print media, a <u>support</u> member supporting and carrying the printing fluid for the at least <u>two printhead integrated circuits</u>, and at least two <u>flexible printed circuit boards</u> for connecting electrical signals to the at least <u>two printhead integrated circuits</u>; <u>drive electronics</u> incorporating at least one <u>controller</u> which</p>

<p>controller for controlling the printing operation of at least one of the at least two printhead integrated circuits; and a casing in which the at least one printhead module and the drive electronics are removably mounted, wherein each of the at least two electrical connectors is arranged to direct control signals from the at least one controller to the corresponding printhead integrated circuit and to direct power from a power supply to the corresponding printhead integrated circuit and the drive electronics.</p> <p>2. A printhead assembly according to claim 1, wherein the at least two electrical connectors each comprise a flexible printed circuit board connected to respective ones of the at least two printhead integrated circuits.</p> <p>3. A printhead assembly according to claim 3 (?), wherein the drive electronics is provided on a printed circuit board carrying respective connection ports which are directly aligned with and connected to the respective flexible printed circuit boards and printhead integrated circuits.</p>	<p>is connected to at least one of the at least two printhead integrated circuits via the respective flexible printed circuit board for controlling the printing operation of at least one of the at least two printhead integrated circuits; and a casing in which the at least one printhead module and the drive electronics are removably mounted, wherein the drive electronics is provided on a printed circuit board carrying respective connection ports for connecting with the flexible printed circuit boards which are directly aligned with the respective flexible printed circuit boards and printhead integrated circuits.</p>
<p>4. A printhead system according to claim 1, further comprising a plurality of longitudinally extending electrical conductors arranged to provide the power from the power supply to the at least two electrical connectors.</p>	<p>3. A printhead assembly according to claim 2, further comprising a plurality of longitudinally extending electrical conductors removably mounted to the support frame and arranged to provide power from a power supply to the drive electronics and the at least two printhead integrated circuits.</p>
<p>5. A printhead system according to claim 1, wherein: the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the at least two electrical connectors, and at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member; and the support member</p>	<p>5. A printhead assembly according to claim 1, wherein: the at least one printhead module is formed as a unitary arrangement of the at least two printhead integrated circuits, the support member, the at least two flexible printed circuit boards, and at least one fluid distribution member mounting the at least two printhead integrated circuits to the support member; and the support member has at</p>

has at least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members.	least one longitudinally extending channel for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures extending through a wall of the <del>support</del> member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than <del>two, all of the printhead integrated circuits</del> by way of respective ones of the fluid distribution members.
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In regard to:

Claim 1:

The subject matters in the instant application such as: at least one print head module, at least two print head integrated circuits, support member, drive electronics, one controller, a casing are the same as those in claim 1 of the co-pending application 10/760,194. Their functions or limitations for each of the subject matters listed before are not repeated here, because are the same.

The "at least two electrical connectors" in the instant application corresponds to the "at least two flexible printed circuit boards" in the co-pending application. Because each of the connectors in the instant application is used to receive a flexible printed circuit board for transmitting signals and power to each of the integrated circuits. Even they are two different subject matters and recited in two different applications, however, per figs. 6 and 18A and B in the co-pending application, one end (81) of the flexible printed circuit board (80) is inserted into a connector (98). They are intimately related to each other.

Claim 2:

This claim is also obvious over claim 1 of the co-pending application of the portion of flexible printed circuit board, and for the discussion of the obviousness, please refer to the discussion to claim 1 set forth above.

Claim 3:

Corresponding to the last wherein paragraph in claim 1 of the co-pending application.

Claim 4:

Corresponding to claim 3 of the instant application.

Claim 5:

Corresponding to claim 5 of the instant application.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.


Double patenting rejection is given in this office action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 571-272-2256. The examiner can normally be reached on 7:30AM -5:00PM.

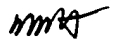
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SHIH-WEN HSIEH**  
**PRIMARY EXAMINER**

  
Shih-wen Hsieh  
Primary Examiner  
Art Unit 2861

SWH



Feb. 22, 2006